BY ORDER OF THE COMMANDER
14TH FLYING TRAINING WING (AETC)

COLUMBUS AFB INSTRUCTION 48-104

2 NOVEMBER 2011

Aerospace Medicine

BASE RADIATION PROTECTION PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing web site at http://www.e-publishing.af.mil/ for downloading or ordering.

RELEASABILITY: There are no releasability restrictions of this publication.

OPR: 14 MDOS/SGOJ

Certified by: 14 MDG/CC
(Col Diane Fletcher)

Pages: 13

This instruction implements AFPD 48-1, *Aerospace Medicine Program,* and establishes requirements and procedures for initiating a base radiation protection program. It applies to all units that use ionizing or non-ionizing radiation producing equipment or materials on Columbus AFB. It also establishes procedures for the appointment of base and unit radiation safety officers and describes their responsibilities. It does not apply to the use of hand-held radios or microwave ovens nor does it apply to exposure of patients by medical professionals during diagnostic or therapeutic procedures. This publication does not apply to Air Force Reserve Command (AFRC) Units and Air National Guard (ANG). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rims.cfm**.

1. Terminology.

1.1. As Low As Reasonably Achievable (ALARA) Program. This is the Air Force policy for minimizing ionizing radiation exposure. ALARA means keeping radiation exposures as low as possible, consistent with existing technology, costs, and operational requirements.

1.2. Base Radiation Safety Officer (BRSO). The BRSO is the overall manager of the Base Radiation Protection Program and is appointed in writing by the 14th Flying Training Wing Commander. This individual will provide consultation and advice on the degree of hazards

associated with all forms of radiation. A bioenvironmental engineer (BE) or BE technician trained in radiation safety will serve as the BRSO (14 MDOS/SGOJ, 434-2285/2284).

1.3. Unit Radiation Safety Officer (URSO). The URSO is the liaison official between the base and the unit. The term "Unit Radiation Safety Officer" is a functional title and is not intended to denote a commissioned status or a job classification. The unit can be a squadron, flight, or element.

1.4. Permit Radiation Safety Officer (PRSO). The PRSO is designated within the terms in a USAF Radioisotope Committee permit or Nuclear Regulatory Commission license to manage the radiation protection aspects of radioactive materials use.

1.5. Radioactive Waste. Radioactive materials no longer useful, repairable, or needed by the Air Force. Excess serviceable or repairable items containing radioactive materials are not considered radioactive waste.

2. Responsibilities.

2.1. **Unit commanders will:** Appoint one or more URSOs and alternates if any radiation producing equipment/material (i.e., X-ray, radioactive material, radio frequency (RF) emitters, etc.) is used or maintained by the unit. The individuals appointed should be knowledgeable on operational characteristics of all radiation sources under his or her responsibility. Therefore, it is acceptable to appoint URSOs at the flight or element level at the commander's discretion. The appointment will be in writing and will include the name of the unit represented and each individual's name, duty phone, and office symbol. A copy of the appointment letter will be sent to the BRSO (14 MDOS/SGOJ).

2.2. **URSOs will.**

2.2.1. Notify the BRSO of all accidents or incidents involving radiation and aid the BRSO in evaluating such exposures to include re-enactment if necessary.

2.2.2. Post the BRSO's and URSO's names, duty phones, and office symbols in each work area where personnel could encounter radiation exposure.

2.2.3. Maintain a copy of this directive in all work areas involved in radiation duties.

2.2.4. Collect data concerning new radiation equipment installation and relay all data to the BRSO.

2.2.5. Maintain reference materials necessary to evaluate procedures concerning radiation protection for personnel.

2.2.6. Establish a unit instruction for the unit radiation protection program and coordinate all unit instructions pertaining to radiation protection with the BRSO before printing. OIs will include the following items or specify them to be included in work area OIs:

2.2.6.1. For radio frequency radiation:

2.2.6.1.1. Include a provision to maintain a current written appointment letter with primary and alternate URSO IAW para 3.1 above.

2.2.6.1.2. Identify the location of all fixed RF emitters, personnel hazard distances, and control procedures to limit personnel access to potentially

hazardous areas.

2.2.6.1.3. Identify approved areas where mobile/portable RF emitters can be perated/maintained and for each type of emitter indicate personnel hazard distances and control procedures to limitpersonnel access to potentially hazardous areas. Include information on interlocks, signage, transmission time limits, beam direction limits, locked fences/gates/doors, dummy load usage, constant observation when transmitting, maximum wattage used, placement in accessible areas, restrictions on free space radiation, flashing lights, audible signals, etc.

2.2.6.1.4. Specify procedures for reporting and investigating potential overexposures. The individual is to report to the family practice clinic or a military emergency room immediately; notify the URSO, (who should in turn contact the BRSO), record information IAW AFOSH Std 48-9, para 3.5**,** and provide technical support for investigation.

2.2.6.1.5. Specify periodic training requirements, to include at least: unit RF radiation sources, safety procedures, and actions to be taken in the event of an accidental overexposure.

2.2.6.1.6. Notify the BRSO (434-2285) of changes in equipment, procedures, or operations that could affect the location, RF radiation intensity, leakage of radiation, or affect exposure levels in any way.

2.2.6.2. For laser radiation: (Note: Owners of laser printers are exempt from this requirement on Columbus AFB, unless you perform maintenance other than normal owner maintenance.)

2.2.6.2.1. Notify the BRSO (434-2285) of any new lasers and of any change in laser installation, operation, controls, etc.

2.2.6.2.2. Immediately notify BRSO/BE (434-2285) and ground safety (434-2519) of any suspected personnel laser radiation overexposure and assist in investigation.

2.2.6.2.3. Provide technical data, operating parameters, and personal protective equipment information to the BRSO for hazard evaluation.

2.2.6.2.4. Specify required protective measures for laser use/maintenance functions performed by workers.

2.2.6.2.5. Ensure laser control panels and laser housing, if separate, are clearly labeled with hazard class.

2.2.6.3. For ionizing radiation:

2.2.6.3.1. Personnel dosimetry program implementation and procedures, to include the thermoluminescent dosimetry (TLD) program and use of daily personal monitors, as appropriate. Handling of documentation Air Force Center for Radiation Dosimetry Listing 1499-1 and 1499-2 and AF Form 1527-1 and 1527-2 should be covered.

2.2.6.3.2. Performance of radiation surveys to ensure no general public exposure exceeding dose rate of 2 mR/hr (milliRoentgens per hour) or 100 mR/year (the

most stringent applies for each case).

2.2.6.3.3. Leak testing procedures, as required in permits.

2.2.6.3.4. Inventory procedures must be done at least annually or as specified in permit. Inventory must include source description, activity for radioactive materials, serial number, and manufacturer of each component of ionizing radiation emitters, storage and use locations, date of inventory, and name/signature of responsible individual.

2.2.6.3.5. Quality assurance procedures (for individuals on TLD program). Specify overexposure; abnormal exposure, investigation, and pregnant female action levels; and procedures to be taken whenever any of these levels are exceeded.

2.2.6.3.6. Receiving and shipping of radioactive materials, as appropriate.

2.2.6.3.7. Permit or license procedures, as appropriate. Note that the "Duty to Report" letter is no longer required.

2.2.6.3.8. ALARA Program - specific management and administrative actions taken to reduce personnel radiation dose to as low a level as possible.

2.2.6.3.9. Procedures to review and ensure BRSO reviews any construction, renovation, modification plans for facilities where radioactive materials or radiation producing devices are used or stored.

2.2.6.3.10. Training. Initial training is required for each individual when assigned to a work area where radioactive material or radiation producing devices are used and annually thereafter. Training must include all elements required by AFI 48-148, paragraph 3.3.

2.2.7. Review and coordinate on all work area or unit instructions for radiation protection.

2.2.8. Maintain an inventory of all radiation emitters used by their unit.

2.2.9. Ensure all areas where radioactive materials or radiation producing devices are used or stored are surveyed by the BRSO at least annually.

2.3. **Each Permit Radiation Safety Officer (PRSO).**

2.3.1. Complies with all requirements in AFI 40-201, para 1.26.

2.3.2. Ensures NRC Form 3 (if required) is posted and contains the supplemental notice in AFI 40-201, para 3.5.

2.3.3. Ensures permitted radioactive materials are secured from unauthorized removal or access at all times or are under constant surveillance of an authorized individual.

2.3.4. Ensures adherence to all permit conditions.

2.3.5. Reports any incidents or accidents involving permitted materials to the BRSO within one hour of discovery. Further notifications will be done IAW AFI 40-201, para 3.12.

2.3.6. Inventories will include: the date of the inventory, model number and serial number of each source as applicable, identity and quantity of radionuclide, location of each source, and the signature of the PRSO.

2.4. **The BRSO will.**

2.4.1. Provide consultation to URSOs on accomplishing their duties.

2.4.2. Evaluate each URSO's radiation protection program annually.

2.4.3. Identify radiation hazard areas, ensure they are properly posted, periodically survey these areas, and recommend procedures and policies to the commander and other responsible personnel.

2.4.4. Maintain close contact with all URSOs and provide consultation, as needed.

2.4.5. Operate the base personal dosimetry program IAW AFI 48-125. Determine the need for use of thermoluminescent dosimeters (TLDs). Document briefing of personnel on proper wear and storage of TLDs at time of issue.

2.4.6. Maintain a master inventory for the following types of radiation emitters: RF, laser, radioactive material, and X-ray. Lasers will be classified using ANSI standard definitions.Provides copies of inventories to the fire chief and chief of civil engineer readiness flight whenever there is a significant change or at least annually.

2.4.7. Report and investigate each case of suspected or actual overexposure or abnormal radiation exposure to determine the cause and prevent a recurrence, to include determining fetal doses for ionizing radiation and the extent of exposure to the affected individuals. Investigate TLD exposures exceeding Investigation Action Levels set below (based on the October 2005 BE Guide to Ionizing Radiation, Table 8-2 most conservative suggestion due to the normal 0.00 rem exposure to Columbus AFB personnel):

2.4.7.1. Total Effective Dose Equivalent (TEDE): annual - 0.5 rem, quarterly - 0.13 rem.

2.4.7.2. Lens of Eye: annual - 1.5 rem, quarterly - 0.37 rem.

2.4.7.3. Extremity, Shallow, Deep Dose, Committed Equivalent, and Head Dose Equivalent: annual - 5 rem, quarterly - 1.3 rem.

2.4.8. Review and coordinate all unit/work area instructions covering radiation protection.

2.4.9. Review all radioactive material permit applications, renewals, or requests for amendment and forward to HQ AETC/SGPB.

2.4.10. Track and provide, if necessary, initial and annual ALARA training to all personnel potentially exposed to ionizing radiation, including housekeeping staff, etc, who are potentially exposed to >10% of the exposure limit.

2.4.11. Review, approve, issue permits for, and monitor contractor use of radioactive material on base.

2.4.12. Maintain a master list of all URSOs.

2.4.13. Survey all areas where radioactive material (RAM) or radiation producing devices are used or stored at least annually.

2.5. **Work Area Supervisors of Radiation Areas.**

2.5.1. Ensure all personnel who work with radiation emitters are properly trained on the potential hazards and that training is documented on the individual's AF Form 55 or equivalent.

2.5.2. Establish a work area operating instruction for the work area radiation protection program or ensure the unit instruction completely covers work area requirements. Coordinate work area instructions pertaining to radiation protection with the URSO and BRSO before printing.

2.5.3. Maintain an inventory of all radiation emitters used or maintained in the work area IAW unit instructions, work area instructions, or permits.

2.5.4. Ensure the names and telephone numbers of the BRSO and URSO (and emergency notification procedures in the event of an accident) are posted in the work area.

2.5.5. Ensure all ionizing radiation workers receive initial and annual ALARA training. Train on specific operating procedures in the work area to keep exposures ALARA.

2.5.6. **Immediately** notify the URSO following a radiation accident/incident. Do not change the set-up of anything involved. Collect all pertinent information concerning the accident/incident and draft a detailed sketch of what happened. Take photos, if possible.

2.5.7. Ensure a current copy of this regulation is maintained in each work area where radiation producing equipment is used, tested, or repaired.

2.5.8. Review AF Center for Radiation Dosimetry Listing 1499, report errors to the BRSO, and maintain in the work area until replaced by AF Form 1527. Ensure a copy of each AF IERA Listing 1527 is returned to the BRSO with certification that the employee received it. Ensure all monitored personnel review these reports.

2.5.9. Ensure TLDs are available for exchange at the end of each monitoring period.

2.5.10. Immediately refer pregnant workers to the public health office, 14 MDOS/SGOL (434-2141).

2.6. **Workers Assigned to Radiation Areas.**

2.6.1. Comply with unit and work area instructions and permit conditions.

2.6.2. Wear TLDs with name side towards the body at all times in occupational radiation areas. Do not wear TLDs when not performing Air Force duties. Report missing or damaged TLDs immediately. Store TLD with control badge when not worn.

2.6.3. Report suspected overexposures immediately.

2.6.4. Report ionizing radiation exposures from outside employment and provide dosimetry results to the BRSO.

2.6.5. Keep ionizing radiation exposures to self and others ALARA.

2.6.6. Review AF Center for Radiation Dosimetry Listing 1499 and AF Form 1527 as provided and notify the BRSO of any errors noted. Certify that you received AF Form 1527 on one copy of the form and return this certification copy to the BRSO.

2.6.7. Report intentional abuse of the dosimetry program.

2.6.8. Immediately report suspected pregnancy to supervisor or primary care manager. Note: It is important to remember that a civilian woman's decision to declare here pregnancy is entirely voluntary. It is the fundamental responsibility of the pregnant worker to decide when and whether she will formally declare her condition.

2.7. **Contract Operations.**

2.7.1. Using activity or requiring agency for any contract will ensure that all contracts requiring the use of RAM on Columbus AFB include a requirement for the BRSO's approval prior to bringing the material on base. Contractor/outside agency use of RAM on Columbus AFB will be conducted under permits issued by the BRSO.

2.7.2. The contracting officer and BRSO must be notified in writing in advance of the date any contractor or outside agency plans to bring RAM onto the base.

2.7.3. To obtain a permit, all contractors must include the following in or with this written notice:

2.7.3.1. A brief description of the proposed activities.

2.7.3.2. A copy of a valid NRC Radioactive Material License or Agreement State Radioactive Materials License (which must be current). All amendments must be included.

2.7.3.3. The name, local address, and phone number of the RSO named on their license.

2.7.3.4. A copy of the portion of the Air Force contract describing the work to be done and inclusive date.

2.7.3.5. Copies of training certificates for authorized users.

2.7.3.6. A copy of most recent leak test results (not over 180 days old).

2.7.3.7. An acknowledgment that the contracting officer has authority to suspend contractor operations believed to be unsafe and the BRSO has the right to make periodic checks.

2.7.4. Contractors holding an Agreement State Radioactive Material License will provide a copy of the license to the contracting officer whom will in turn provide a copy to BRSO. The copy will be a completed NRC Form 241, *Report of Proposed Activities in Non-Agreement States*, listing equipment to be used on Columbus AFB exactly as shown on the State Radioactive Materials License or US NRC Radioactive Materials License.

2.7.5. Contractors will not bring RAM onto Columbus AFB without written consent of the contracting officer. Permission, if granted, will be only for the activities and isotopes specified in the documents submitted.

2.7.6. Use of radioactive material will be minimized consistent with Air Force requirements.

2.7.7. Every accident or incident involving licensed RAM will be reported to the BRSO immediately.

2.7.8. Contractors holding an Agreement State License will provide the following documentation to the contracting officer whom will in turn provide to the BRSO:

2.7.8.1. Provide a monthly written report listing dates the isotopes were used on Columbus AFB.

2.7.8.2. Provide a copy of all leak test results within 10 days of receipt.

2.7.9. The contracting officer may terminate permission to use RAM on Columbus AFB at any time for violation or noncompliance with NRC, US Air Force, state, or other regulatory requirements.

2.8. **Transportation of Radioactive Material**: Transportation and control of radioactive materials while on Columbus AFB will only be conducted in accordance with 49 CFR 172.500 through 49 CFR 172.556.

2.8.1. Vehicles transporting radioactive material on Columbus AFB will be marked with the appropriate radioactive material warning placards affixed to a conspicuous place on each side of the transport vehicle.

2.8.2. The source will be transported in the original manufacturer's shipping container or equivalent type "A" shipping container.

2.8.3. The isotope will be secured via lock and key when not in actual use.

2.8.4. Radioisotopes will not be kept on base overnight without specific permission from the BRSO.

2.9. **14th Civil Engineer Squadron** will inform the BRSO of all future planned uses of RAM on Columbus AFB by contractors or other outside agencies under their jurisdiction.

2.10. **14th Security Forces** will check government bills of lading for RAM and if listed will request driver/contractors produce written authorization from BRSO. If driver/contractor doesn't have authorization, SF will contact BRSO at 434-2285 during normal duty hours or by calling the on-call BE representative through the command post.

2.11. **14th Logistics Division Supply Flight will.**

2.11.1. Maintain a radioactive material storage area for serviceable or unserviceable stock-listed commodities (containing radioactive materials) that have been turned in by using organizations for return to stock. Notify the BRSO of the location of each RAM storage area and a point of contact for access to the area for survey.

2.11.1.1. Ensure RAM storage area is properly identified IAW 10 CFR 20.19.

2.11.1.2. Ensure each bin containing a radioactive commodity is properly marked/labeled IAW 10 CFR 20.19.

2.11.1.3. Ensure the storage area will remain an unrestricted area as long as no more than 100 radioactive electron tubes/spark gaps are stored there and the radiation dose rate outside the bins remains below 2 mR/hr.

2.11.1.4. Ensure the BRSO surveys the storage area annually. Contact the BRSO if the number or type of items in storage change significantly.

2.12. **14th Logistics Division Transportation Flight will.**

2.12.1. Determine whether or not each outgoing shipment contains RAM and ensure packaging and labeling complies with DOT requirements.

2.12.2. Notify the BRSO, **prior to shipment**, of any outgoing packages that contain RAM. Provide the BRSO with: the identity of the shipper, the appropriate point of contact, and their phone number. Radioactive material packages must not be shipped without BRSO approval.

2.12.3. Notify the BRSO of all RAM packages received prior to forwarding package to recipient. If a package containing radioactive material is received in damaged condition, notify the BRSO immediately.

2.13. BE must inspect radioactive materials receipts and document. Records must be retained for all permitted materials.

3. Medical Examinations: Medical examinations/blood screenings are no longer required for placement on the TLD program. Routine or pre-placement exams are not required for radio frequency radiation, ultraviolet radiation, or laser radiation for lasers in Classes 1 through 3a. In all cases, if there is a suspected overexposure, the individual should report to the medical clinic for an examination.

4. Radioactive Material Disposal Procedures.

4.1. Excess serviceable or repairable items containing radioactive material must be reported to the appropriate item manager when they are no longer required locally.

4.2. Radioactive Electron Tubes and Spark Gaps will be disposed of in accordance with T.O. 00-110N-7S-2, *Handling and Disposition of Radioactive Electron Tubes and Spark Gaps*.

4.3. Generators of other RAM requiring disposal will submit a written request for disposal guidance to the BRSO. The request must contain as much of the following information as possible: name of item, quantity, radionuclide, physical form of the radionuclide (solid, liquid, gas), chemical form of the radionuclide, National Stock Number (NSN), activity of the item in millicuries, and the name and phone number of the point of contact.

5. Static Displays.

5.1. The wing historian shall establish a radiation safety record for each historical aerospace vehicle managed in accordance with AFI 84-103. These records will detail all radioactive commodities present in each vehicle as documented by initial and periodic radiation surveys.

5.2. The BRSO shall conduct an initial radiation survey of each static display and document findings on AF Form 3583, **Static Display Aerospace Vehicle/Component Radiation Survey Log**, and/or AF Form 3584, **Static Display Aerospace Vehicle/Component**

Radiation Swipe Log. If RAM are determined to be present in a static display vehicle, the BRSO will ensure radiation exposures to AF personnel and the public are kept within acceptable limits. In addition, if RAM is present, the BRSO will perform periodic surveys of the display every three years.

5.3. If RAM is found to be present in a static display, all maintenance activity for the radioactive component(s) must be coordinated through the BRSO. Radioactive components must never be sanded, ground, machined, drilled, etched, or subjected to any process that produces respirable particles or changes the form of the component.

5.4. Report any damage to radioactive components of static displays to the BRSO immediately.

6. BE will ensure the attached checklist review is completed prior to updating or rewriting this supplement. BE will complete the attached checklist to evaluate the effectiveness of this instruction as part of the 14 MDG semiannual self-inspection.

BARRE R. SEGUIN, Colonel, USAF
Commander, 14th Flying Training Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

10 CFR Part 20, *Standards for Protection Against Radiation,* dated 28 Aug 07

29 CFR 1910.1096, *Ionizing Radiation,* dated 20 Jun 96

Air Force Instruction 40-201, *Managing Radioactive Materials in the USAF,* 16 Mar 11

Air Force Manual 48-125, *Personnel Ionizing Radiation Dosimetry Program,* 4 Oct 11

Air Force Instruction 84-103, *USAF Heritage Program,* dated 27 Oct 04

Air Force Instruction 48-148, *Ionizing Radiation Protection,* dated 21 Sep 11

AFOSH Standard 48-9, *Radio Frequency Radiation (RFR) Safety Program,* dated 1 Aug 97

AFOSH Standard 48-139, *Laser Radiation Protection Program*, dated 10 Dec 99

Technical Manual T.O. 00-110N-7S-2, *Handling and Disposition of Radioactive Electron Tubes and Spark Gaps,* dated 27 May 97

Technical Manual T.O. 00-110N-10, *Requisitioning, Use, and Disposition of Lensatic Compass FSN 6605-079-0007YS*

Technical Manual T.O. 00-110N-12, *Requisitioning, Use, Storage, and Disposition of Submersible Wrist Compass NSN 6540-00-382-1000*, dated 27 May 97

Technical Manual T.O. 33B-1-1, *Non Destructive Inspection Methods,* dated 15 Jun 07

Technical Manual T.O. 33B-1-1, *Base Level Management of Radio Frequency Radiation Protection Program,* dated 15 Jun 07

HQ ATC/SGPB Policy Letter, *Base Radiation Protection Program Guidance,* dated 4 Oct 90.

HQ ATC/SGPB Policy Letter, *Radiofrequency (RF) Radiation and the As Low As Reasonably Achievable (ALARA) Principle,* dated 5 Nov 92.

HQ AFMOA/SGPA Memorandum, *USAF Adoption of New ANSI/IEEE Personnel Radiofrequency Standard,* dated 27 Mar 95.

HQ AETC/SGPB Memorandum, *Radiofrequency Radiation Hazard Warning Signs (BE 95-04),* dated 26 Apr 95.

Adopted Forms

AF Form 1527-1, *Annual Report of Individual Occupational Exposure to Ionizing Radiation,* dated Feb 07

AF Form 1527-2, *Cumulative History of Individual Occupational Exposure to Ionizing Radiation,* dated Feb 07

AF Form 3583, *USAF Museum Aerospace Vehicle Static Display/Component Radiation Survey Log,* dated 1 Mar 95

AF Form 3584, *USAF Museum Aerospace Vehicle Static Display/Component Radiation Swipe Log,* dated 1 Mar 95

AF Form 847, *Recommendation For Change Of Publication,* dated 22 Sep 09

Attachment 2

LOCAL SELF-INSPECTION CHECKLIST

CAFBI 48-104

Table 2.1. BASE RADIATION PROTECTION PROGRAM.

SELF-INSPECTION CRITERIA	YES	NO	N/A
BIOENVIRONMENTAL			
Annual verification of most current enabling documentation and citing references			
Verification of all phone numbers and POC's			
Verify documentation exists of radiation surveys performed to ensure to general public exposure exceeding does rate of 2 mR/hr or 100 mR/yr.			
Verify documentation exists of initial and annual ALARA training for workers potentially exposed to ionizing radiation			
Verify correct wear of TLDs			
Ensure a process is in place to identify pregnant employees who are assigned to radiation areas.			
Verify documentation exists of BRSO annual surveys of RAM storage areas.			
Verify documentation exists of BRSO surveys every 3 years for static displays containing RAM.			